



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,725	02/14/2001	Thomas R. Firman	10591-003008	6557
26161	7590	04/20/2005	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			ARMSTRONG, ANGELA A	
			ART UNIT	PAPER NUMBER
			2654	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/783,725

Applicant(s)

FIRMAN, THOMAS R.

Examiner

Angela A Armstrong

Art Unit

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-57 is/are pending in the application.
- 4a) Of the above claim(s) 4,5 and 16-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-15 and 40-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 14 and 59 are rejected under 35 U.S.C. 102(e) as being anticipated by Goldhor (US Patent No. 5,231,670).
2. Regarding claim 14, Goldhor teaches a voice user interface device comprising means for converting a voiced utterance into a corresponding signal as an input to a computer or into an internal command to the interface device, the voiced utterance being one of a set of voiced utterances that the means for converting is configured to convert, the internal command being a command to adjust the set of voiced utterances and means for recognizing the voiced utterance as either one to be converted to said signal or as one to be converted to said command (Figure 1, elements 12, 14, 16, 18, “recognizer”; col. 1, lines 17-20 55-68; col. 2, lines 1-2; col. 4, lines 10-13; col. 5, lines 40-55; col. 6, lines 46-48).
3. Regarding claim 59, Goldhor teaches a voice user interface device comprising means for converting a voiced utterance into a corresponding signal as an input to a computer, means for converting a voiced utterance into a corresponding internal command to the voice user interface device to cause the voice user interface device to accept information about the set of voiced utterances the device is capable of recognizing and the set of signals and internal commands that correspond to each member of the set of voiced utterances the voice user interface device is capable of recognizing; and means for recognizing a voiced utterance as either one to be

Art Unit: 2654

converted to a signal or ms one to be converted to an internal command (Figure 1, elements 12, 14, 16, 18, "recognizer"; col. 1, lines 17-20 55-68; col. 2, lines 1-2; col. 4, lines 10-13; col. 5, lines 40-55; col. 6, lines 46-48).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldhor.
5. Regarding claim 58, Goldhor does not teach that the adjusting of the voiced utterances includes the set of voiced utterances the device is configured to convert is adjusted by adding an additional voiced utterance to the set. However, adjusting a set of voiced utterances by adding an additional voiced utterance to a set was well known in the art so as to allow the user to upgrade/update system vocabularies as the user expands the applications and functionality of the voice user interface device, and it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Goldhor to provide for adjusting the set of accepted voiced utterances by adding an additional voice utterance to the set, for the purpose of providing upgraded/updated vocabularies so as to expand functionality and capabilities of the interface.
6. Claims 6-13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldhor (US Patent No. 5,231,670) in view of Torres (US Patent No. 4,821,211).

Art Unit: 2654

7. Regarding claim 6, Goldhor teaches a voice user interface system for producing input to a computer, and a program for execution on said computer, a state of said program, said configuration being associated with control of said program, comprising a voice recognizer for recognizing a voiced utterance and for providing corresponding signals as input to said computer (Figure 1, elements 12, 14, 16, 18, “recognizer”; col. 1, lines 17-20 55-68; col. 2, lines 1-2; col. 4, lines 10-13; col. 6, lines 46-48), and a converter for converting said voiced utterance into a command string including a command directing motion of said pointer relative to said configuration (col. 1, lines 17-20 55-68; col. 2, lines 1-2; col. 4, lines 10-13; col. 6, lines 46-48).

Goldhor does not specifically teach mimicking mouse commands or various details related to the display of the graphical user interface. Torres teaches a method and apparatus for Navigating among program menus using a graphical menu tree and provides a description of well known cursor functionality and graphical user interface display for permitting computer users to access computer applications and manage windows by graphically designating graphic representations and manipulating those graphical representations via a graphic pointing device or voice interaction (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56).

It would have been obvious to one of ordinary skill at the time of the invention to provide for the manipulation of the movement of the cursor via vocal interaction as taught by Torres, in the system of Goldhor, because this would enable a person who is not physically able to move the cursor to be able to move the cursor or access and control icons/applications via vocal commands.

Art Unit: 2654

Regarding claim 7, Goldhor teaches command string further comprises a command to said program at (col. 1, lines 17-20 55-68; col. 2, lines 1-2; col. 4, lines 10-13; col. 6, lines 46-48).

Regarding claim 8, similar limitations to claim 6 are discussed above. Additionally, Goldhor teaches converting based on a state of the subsystem comprising said voice recognizer and said converter at col. 1, lines 55-60; col. 8, lines 24-27, as converting a voiced utterance to control an application.

Regarding claim 9, similar limitations to claim 6 are discussed above. Additionally, Goldhor teaches converting based on a state of said program at col. 1, lines 55-60; col. 8, lines 24-27, as converting a voiced utterance to control an application.

Regarding claim 10, Goldhor teaches converting voiced utterances to text at col. 1, lines 55-57.

Regarding claim 11, Goldhor teaches using keyboard as the alternative at col. 1, lines 67-68, col. 2, lines 1-2; col. 6, lines 46-48.

Regarding claim 12, Goldhor does not specifically teach an event queue. However, providing an event queue in a computer operating system was well known in the art so as monitor and maintain system processing for allowing for a multi-tasking system.

It would have been obvious to one of ordinary skill at the time of the invention to provide an event queue in the operating system as was well known in the art, in the system of Goldhor, for the purpose of providing for a reliable and efficient multi-tasking operating system.

Regarding claim 13, similar limitations to claim 6 are discussed above. Additionally, Goldhor teaches pointer movement continued unabated until stopped by an action of the user at

Art Unit: 2654

col. 1, lines 67-68, col. 2, lines 1-2 and col. 6, lines 46-48, since using the voice input as equivalent to keyboard or mouse input.

Regarding claim 15, similar limitations to claims 6-9 are discussed above. Additionally, Goldhor teaches mapping from a member of said set of internal representations to a member of said set of output strings used by said converter at col. 1, lines 27-34, col. 5, lines 3-5, 61-66; col.6, lines 18-26, as permitting multiple recognizer representations to be mapped to a single command.

8. Claims 35-39 and 41-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torres (US Patent No. 4,821,211).

9. Regarding claim 35, Torres teaches a method and apparatus for navigating among program menus using a graphical menu tree and provides a description of well known cursor functionality and graphical user interface display for permitting computer users to access computer applications and manage windows by graphically designating graphic representations and manipulating those graphical representations via a graphic pointing device or voice interaction (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56), which reads on a method for use with a machine having a graphical user interface and an application program, the method comprising the graphical user interface enabling a user to launch the application program and receiving a voice utterance from a user.

Torres does not specifically disclose launching the application program in response to the received voiced utterance. However, the teachings of Torres describe the well-known

Art Unit: 2654

implementation of a pointer for accessing computer applications and disclose using voice interaction to control system functionality.

It would have been obvious to one of ordinary skill at the time of the invention to use the system of Torres to launch application programs via voice control of the cursor so as to provide computer access to application programs for physically challenged individuals.

Regarding claim 36, Torres teaches an operating system with a graphical interface at (col. 4, lines 3-6).

Regarding claim 37, Torres teaches the graphical user interface is shown on a display at col. 3, line 67.

Regarding claim 38, Torres teaches the machine comprises a computer (col. 4, lines 1-7).

Regarding claim 39, similar limitations to claim 35 are discussed above. Additionally Torres teaches there are multiple application programs (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56).

Regarding claim 40, similar limitations to claim 35 are discussed above. Additionally, Torres teaches there are multiple application programs, an operating system provides the graphical user interface, the graphical user interface is shown on a display, and the machine comprises a computer (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56),

Regarding claim 41, similar limitations to claim 35 are discussed above. Additionally, Torres teaches manipulating one other graphical item (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56), as various menu items, windows or graphical representations to which the user has access and control.

Art Unit: 2654

Regarding claim 42, Torres teaches an operating system with a graphical interface at (col. 4, lines 1-17).

Regarding claim 43, Torres teaches the graphical user interface is shown on a display at col. 3, line 67.

Regarding claim 44, Torres teaches the machine comprises a computer (col. 4, lines 1-7).

Regarding claim 45, similar limitations to claims 35 and 41 are discussed above. Additionally Torres teaches there are multiple graphical items and manipulating the other graphical items (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56), as various menu items, windows or graphical representations to which the user has access and control.

Regarding claims 46-51, Torres teaches manipulating other graphical items includes altering size and location of a window (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56).

Regarding claim 52, similar limitations to claims 35, 41 and/or 45 are discussed above. Additionally, Torres teaches selectable menu items (Figures 1-3 and 4D).

Regarding claim 53, similar limitations to claim 35 are discussed above. Additionally Torres teaches there are multiple graphical representations (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56).

Regarding claim 54, Torres teaches the graphical user interface is shown on a display at col. 3, line 67.

Regarding claim 55, Torres teaches the machine comprises a computer (col. 4, lines 1-7).

Regarding claim 56, Torres does not specifically disclose performing a function associated with a menu item in response to a second received voiced utterance. However, the

Art Unit: 2654

teachings of Torres describe the well-known implementation of a pointer for accessing computer applications and disclose using voice interaction to control system functionality.

It would have been obvious to one of ordinary skill at the time of the invention to use the system of Torres to provide application programs or other menu item functionality via second or additional received voiced utterances so as to provide computer access to application programs for physically challenged individuals.

Regarding claims 57, Torres teaches manipulating other graphical items includes altering size and location of a window (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56).

Response to Arguments

10. Applicant's arguments with respect to claims 6-15 and 40-57 have been considered but are moot in view of the new ground(s) of rejection.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A Armstrong whose telephone number is 571-272-7598. The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2654

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Angela A Armstrong
Examiner
Art Unit 2654

AAA
April 15, 2005

Angela A. Armstrong